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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,647	02/12/2001	George H. Lydecker	3054-028	8365
22440	7590	06/02/2005	EXAMINER	
GOTTLIEB RACKMAN & REISMAN PC			LAO, LUN S	
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NEW YORK, NY 100160601			2643	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/781,647

Applicant(s)

LYDECKER ET AL.

Examiner

Lun-See Lao

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-30 and 42-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-30 and 42-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/23/2001
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Introduction

1. This is response to response to restriction requirement filed on 03-09-2005. Applicant elects group II, without traverse and claims 12-24, 25, 26-30 and 42-52 are pending.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the device number 10 is not in the figures 1, 4, 5, and 6 (see specification page lines 22-26). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the

Art Unit: 2643

page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12-16, 22-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shennib (US PAT. 5,923,764) in view of French (US PAT. 3,302,293).

Consider claim 12, Shennib teaches a device for optimal positioning a plurality of speakers of a multi-speaker sound system with respect to a reference point (see figs. 7-8, (88)), said device comprising:

a base (see fig.6);

an azimuth locating mechanism mounted on said base and rotatable about said center point (see fig.5), said azimuth locating mechanism including a first beam generator adapted to generate a beam of light (by infrared light emitter) to indicate an angular position for said speakers (see figs. 7-8), and to indicate when a distance between said device and a respective speaker within a predetermined range

Art Unit: 2643

(see col.14 line 37-col.15 line 16), but Shennib does not clearly teach a distance indicator.

However, French teaches a distance indicator (see figs 1-3 and col.1 line 35-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of French in to Shennib to provide a sighted point is directly indicated on the table without computation of any kind.

Consider claims 13-14, Shennib teaches the device of fudher comprising a plurality of pointers arranged radically around a center point (see figs 7-8(88)), each pointer indicating a position for one of said speakers (89-92 and see col.14 line 37-col.15 line 16); and the device of further comprising a location indicator (see fig.7-8 (#1..#3)) adapted to indicate the relative position of said azimuth locating mechanism and said Pointers (see col.14 line 37-col.15 line 16).

Consider claims 15-16, French teach the device of the base is a disk shaped plate with a top surface and wherein said pointers (see figs.2-3, (114,102)) are arranged on said top surface (see col.5 line 49-col.6 line 10); and the device of the base is a disk shaped plate with a side surface and wherein said pointers (see figs.2-3, (114,102)) are arranged on said side surface (see col.5 line 49-col.6 line 10).

Consider claims 22-23, French teaches a distance indicator, but Shennib and French fail to teach the device of the distance indicator comprises an acoustic device or a radar device. However, it is well known in the art that using an acoustic device or a radar device to measure the distance and therefore it would have been obvious that

Art Unit: 2643

Shennib and French could have the distance indicator comprising an acoustic device or a radar device for market demand.

Consider claim 25, Shennib teaches that a method of locating speakers of a multi-speaker system at optimal positions with respect to a reference point, said method comprising:

placing a speaker locating device at said reference point (see figs. 7-8(88)), said speaker locating device including a beam generator (by infrared light emitter) rotatable about an axis passing through said reference point and generating a light beam (infrared emitter); placing a first speaker along a first axis passing through said reference point (88); directing said light beam at said first speaker to define a reference line; and a predetermined angle with respect to said reference line to define a second axis; and a placing a second speaker on said second axis (see figs 7-8 and col.14 line 3-col.15 line 16), but Shennib does not clearly teach a rotating beam generator.

However, French teaches a rotating beam generator (see figs 2-4 and col.3 line 30-col.5 line 16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of French in to Shennib to provide the direction of the guideway is preferably controlled automatically by the sighting device in the manner just described for the direction indicator.

Art Unit: 2643

6. Claims 26-30, 42-46, and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shennib (US PAT. 5,923,764) as modified by in view of Kordana (US PAT. 5,118,184).

Consider claim 26, Shennib teaches a method of placing a plurality of speakers at predetermined angles and a common distance from a reference point, said method comprising (see figs. 7-8):

placing a speaker locating device at said reference point, said speaker locating device including an azimuth locating mechanism including a first beam generator (by infrared light emitter), said beam generator being rotatable about an axis passing through said reference point (88); placing a first speaker (#1 speaker) in a first position spaced at said common distance from said reference point (88); directing said beam generator (infrared light emitter) at said first speaker along a reference axis and rotating them with respect to each other to obtain spots on said speaker having a predetermined spatial relationship, fixing the relative position of wherein beam generators with respect to each other; rotating azimuth locating mechanism to a position defined by a second axis at a predetermined angular offset from said reference axis; placing a second speaker (#2 speaker) along said second axis with said spots impinging on said second speaker', and adjusting (by calculating) the position of said second speaker until said spots are approximately in said predetermined spatial relationship (see figs. 5, 7-8 and col.14 line 37-col. 15 line 16), but Shennib does not teach a second beam generator, said beam generators being rotatable with respect to each other.

Art Unit: 2643

However, Kordana teaches a first and a second beam generator (see fig.6 154,152), said beam generators being rotatable with respect to each other (see figs 5-6 and col.5 line 4-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Kordana in to the teaching of Shennib to provide easily set up and used.

Consider claim 27 Shennib teaches the method of the spots are offset along a first line in said predetermined spatial relationship, said first line being transversal to said first and second axes (see figs. 5, 7-8 and col.14 line 37-col. 15 line 16).

Consider claim 28, Kordana teaches the method of the distance between said first speaker (object) and said reference point is determined using a separate distance detector (see figs 5-6 and col.5 line 4-65).

Consider claim 29 Shennib teaches the method of the distance between said first speaker and said reference point is determined using said speaker locating device (see figs. 7-8 and col.14 line 37-col. 15 line 16).

Consider claim 30, Kordana teaches the method of said first and second beam generators (see figs. 5-6, 152,154) are locked with respect to each other while said azimuth locating mechanism is rotated (see figs 5-6 and col.5 line 4-65).

Consider claim 42, Shennib teaches a speaker aligning device to place a plurality of speakers at an equal distance from a reference point, wherein said speaker aligning device comprises:

Art Unit: 2643

a supporting base having a center to be placed at said reference point (see figs 7-8, 88);

a first beam generator coupled to said supporting base (see figs. 5, 7-8 and col.14 line 37-col. 15 line 16); but Shennib does not teach a second beam generator coupled to said supporting base and rotatable with respect to said first beam generator, a first lock arranged to secure said first beam generator with respect to the second beam generator while said beam generators are moving with respect to said base.

However, Kordana teaches a second beam generator (see figs. 5-6, 152,154) coupled to said supporting base and rotatable with respect to said first beam generator, a first lock arranged to secure said first beam generator with respect to the second beam generator while said beam generators are moving with respect to said base (see figs 5-6 and col.3 line 54-col.4 line 62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Kordana in to the teaching of Shennib to provide easily set up and used.

Consider claims 43-44 Kordana teaches the aligning device of further comprising a first bracket (see fig.4, 96) joined to said supporting base at the center of said supporting base; and a second bracket (see fig.4, 96) joined to the first bracket to support the second beam generator while allowing said second beam generator (see figs. 5-6, 154,152) to be rotated about the center of the supporting base (see figs 5-6 and col.5 line 4-65).

Art Unit: 2643

Consider claims 45-46, Kordana teaches the aligning device of claim 43 further comprising a first locking mechanism to selectively allow the first bracket (see fig. 4, 96) to move to rotate the first beam generator about the center of the supporting base and to secure the first beam generator from movement (see col. 3 line 31-col. 4 line 49 and col. 5 line 3-61); and the aligning device of further comprising a second locking mechanism to selectively allow the second bracket (see fig. 4, 96) to move to rotate the second beam generator (see figs. 5-6, 154) about the center of the supporting base and to secure the second beam generator from movement (see col. 3 line 31-col. 4 line 49 and col. 5 line 3-61).

Consider claim 49, Kordana teaches the aligning device of the first and second beam generators (see figs. 5-6, 152, 154) are selected from a group of reference pointers consisting of laser devices, radar range detectors, ultrasonic range detectors, and optical projectors (see figs 5-6 and col. 5 line 4-65).

Consider claims 50-52, Shennib teaches the speaker aligning device of the speakers to be placed are in a surround sound system (see figs. 5, 7-8 and col. 14 line 37-col. 15 line 16); and the speaker aligning device of further comprising a pedestal coupled to said supporting base to maintain the center of the supporting base at the reference point (see figs. 5, 7-8 and col. 14 line 37-col. 15 line 16); and the speaker aligning device of further comprising indicia placed on said supporting base indicating azimuth designations for each speaker (see figs. 5, 7-8 and col. 14 line 37-col. 15 line 16).

Art Unit: 2643

7. Claims 17-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shennib (US PAT. 5,923,764) as modified by French (US PAT. 3,302,293) as applied to claim 12 above, and further in view of Kordana (US PAT. 5,118,184).

Consider claim 17, Shennib teach that they indicate the optimal position for that speaker (see figs 7-8 and col. 14 line 37-col.15 line 16); but, Shennib and French do not teach the device of further comprising a second beam generator adapted to generate a second light beam, wherein when said light beams impinge on one of said speakers.

However, Kordana teaches the device of further comprising a second beam generator adapted to generate a second light beam, wherein when said light beams impinge on one of said speaker (objects) (see figs. 5-6 and col. 5 lines 16-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Kordana in to the teaching of Shennib and French to provide easily set up and used.

Consider claims 18-19, Kordana teaches the device of the beam generators are laser devices (see fig.6 150); and the device of the beam generators are optical devices adapted to generate respective images (see figs. 5-6 and col. 5 lines 16-23).

Consider claim 20 Kordana teaches that the device of the azimuth locating mechanism includes an altitude adjustment bracket (see fig.7, 96), said beam generators being mounted on said altitude adjustment bracket, said altitude adjustment bracket being movable to direct beams from said beam generators at speakers (objects)

Art Unit: 2643

disposed in a plane spaced away from a plane of said base (see figs. 6-8 and col. 5 lines 23-65).

Consider claim 21, French teaches the device of the beam generators are adapted to generate respective beams which, when impinging on one of said speakers (objects), are offset in a predetermined direction (see figs.2-3 and col.3 line 28-col.4 line 37).

Consider claim 24, Kordana teaches the device of further comprising a lock adapted to secure said azimuth locating mechanism in one of several predetermined positions with respect to said base (see figs.3-4 and col.3 line 5-col.4 line 4).

8. Claims 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shennib (US PAT. 5,923,764) as modified by Kordana (US PAT. 5,118,184) as applied to claim 12 above, and further in view of Cain (US PAT. 6,055,046).

Consider claims 47-48, Kordana teaches the aligning device of further comprising an elevation adjustment mechanism to adjust the first and second beam generators (see figs. 5-6, 152,154) such that the first and second reference selectively are moved from a plane containing said supporting base (see figs 5-6 and col.5 line 4-65); and the aligning device of the first bracket (see figs. 3-4, 96) comprises an altitude adjustment mechanism to selectively adjust the first and second beam generators (see figs. 5-6, 152, 154) such that the first and second reference are moved from a reference plane containing the reference point (see col.3 line 31-col.4 line 49 and col.5 line 3-61), but Shennib and Kordana do not clearly teach a reference markers.

Art Unit: 2643

However, Cain teaches the reference markers (see fig. 5 and col.11 line 54-col.12 line 60)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Cain in to the teaching of Shennib and Kordana to provide a system and method for aligning a laser transmitter accurately.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Matthews et al. (US PAT. 5,402,226) is recited to show other related the speaker alignment tool.

10. Any response to this action should be mailed to:

Mail Stop ____ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Facsimile responses should be faxed to:
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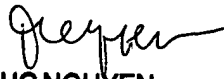
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (571) 272-7499.

Art Unit: 2643

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao, Lun-See
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501


DUC NGUYEN
PRIMARY EXAMINER